

**Disclaimer:**

This English translation is produced by machine translation and may contain errors. The JPO, the INPIT, and those who drafted this document in the original language are not responsible for the result of the translation.

**Notes:**

1. Untranslatable words are replaced with asterisks (\*\*\*).
2. Texts in the figures are not translated and shown as it is.

Translated: 00:22:40 JST 01/07/2009

Dictionary: Last updated 12/10/2008 / Priority: 1. Electronic engineering / 2. Information communication technology (ICT) / 3. Technical term

---

## FULL CONTENTS

---

### [Claims]

[Claim 1] In the tubed case for protection, equip the camera for surveillance, and a front lid with transmitting glass in the front of the case for protection Moreover, the DC code for attaching a rear surface lid to the rear surface in the shape of seal, respectively, and supplying an operation power supply to the camera for surveillance, The protective device of the camera for surveillance characterized by preparing the resistor which is equipped with the BIDIO output code for sending out the imaging signal of the camera for surveillance, respectively, and generates heat by the operation power supply of the camera for surveillance to the inside of said transmitting glass in the range which does not bar the monitoring area of the camera for surveillance.

[Claim 2] The protective device of the camera for surveillance according to claim 1 which prepares a shadow layer in the transmitting glass side of the position in which the resistor was prepared.

[Claim 3] The protective device of the camera for surveillance according to claim 1 or 2 which a resistor consists of the block form which surrounded the Nik ROHM line with the insulation material, and attaches this resistor to the inside up-and-down position or/and right-and-left position of transmitting glass.

[Claim 4] The protective device of the camera for surveillance according to claim 1 or 2 with which a resistor consists of the Nik ROHM line, and prepares this resistor in the up-and-down position or right-and-left position of a transmitting glass inside.

---

### [Detailed explanation of a design]

[0001]

[The technical field to which a design belongs]

An application concerned cancels the cloudy weather produced in the transmitting glass of the front of the case for protection by the inside of the case for protection equipped with a surveillance camera of the letter of seal, and a difference of temperature with the open air, and is related with the protective device of the camera for surveillance which holds the monitoring function by a camera lens effectively.

[0002]

[Description of the Prior Art]

When the camera for surveillance is conventionally installed in the outdoors of a cold district, a camera lens becomes cloudy by snowstorm etc., and, and failure arises in the electronic circuit of the camera for surveillance due to the temperature fall of a degree very much, or it sets to the tropics. [ that the field of view is barred ] For example, the protective device of the camera for surveillance for canceling \*\*\*\* by which a big difference of temperature arises and the field of view of a camera lens is barred by dew condensation between the open air by the cause of the open air falling remarkably temporarily by arrival of a squall is well-known.

[0003]

While the protective device of this well-known surveillance camera equips the inside of the tubed case for protection with the camera for surveillance, the transmitting glass which fits into that longitudinal dimension the front lid and rear surface lid which consist of elastic material, such as rubber, in the shape of air-water dense, and stands face to face against a front lid with the lens of the camera for surveillance is formed.

[0004]

Moreover, the front part position within said case for protection is equipped with the AC-DC conversion circuit for a heater to obtain the operation power supply (DC 5-24V) of the camera for surveillance from the source power supply of AC, or small [ for DC ] fan and AC100V in the rear position, respectively.

[0005]

Furthermore, the BIDIO signal output code for sending out an imaging signal with the camera for surveillance and the AC cord for supplying the source power supply of AC100V to the AC-DC conversion circuit and a heater are drawn by the exterior of the case for protection again.

[0006]

While carrying out a deer and installing the case for protection in the roof by a necessary means when using it, it directs at the place which is going to supervise the front lid, and the source power supply of AC100V is supplied to an AC cord.

[0007]

Then, while the monitor of the lookout post in which the camera for surveillance operates and which has an imaging signal by it in a remote place through BIDIO signal output code by a DC power supply etc. is supplied through the AC-DC conversion circuit, it is recorded if needed.

[0008]

Moreover, a heater generates heat by AC power supply, and a fan operates by AC power supply or a DC power supply. The air heated at said heater can cancel the cloudy weather and dew condensation which are sprayed on the transmitting glass of a front lid with a fan, and occur in this transmitting glass.

[0009]

[Problem(s) to be Solved by the Device]

However, thing for which a useless space is required while according to the protective device of the above-mentioned conventional camera for surveillance forming a heater and a small fan in a protection case and becoming its length cost overrun [0010]

Since it is the method of spraying the air heated at the heater on a transmitting glass side with a small fan, the transmission efficiency of heat is bad [0011]

Since wiring of the AC cord for source power supplies is needed at least in order to operate a heater, the danger of being based on difficulty, a short circuit, etc. is followed on the wiring [0012]

There were un-arranging -- by the temperature rise within the case for protection, there is \*\*\*\* which

gives the trouble on operation to the camera for surveillance itself.

[0013]

[Means for solving problem]

Then, in order that an application concerned may cancel conventional un-arranging [ above-mentioned ], in the tubed case for protection Equip the camera for surveillance and a front lid with transmitting glass in the front of the case for protection Moreover, the DC code for attaching a rear surface lid to the rear surface in the shape of seal, respectively, and supplying an operation power supply to the camera for surveillance, It is characterized by preparing the resistor which is equipped with the BIDIO output code for sending out the imaging signal of the camera for surveillance, respectively, and generates heat by the operation power supply of the camera for surveillance to the inside of said transmitting glass in the range which does not bar the monitoring area of the camera for surveillance.

[0014]

In the above, a shadow layer is preferably prepared in the transmitting glass side of the position in which the resistor was prepared.

[0015]

Moreover, a resistor specifically consists of the block form which surrounded the Nik ROHM line with the insulation material. This resistor is attached to the inside up-and-down position or/and right-and-left position of transmitting glass, or a resistor consists of the Nik ROHM line and prepares this resistor in the up-and-down position or right-and-left position of a transmitting glass inside.

[0016]

[Embodiment of the Invention]

Based on Drawings, the work example of an application concerned is explained in full detail below.

Drawing 1 is a whole perspective view and drawing 2 is the sectional view showing the internal structure.

[0017]

1 is shown and the case for protection [ this case 1 for protection ] It is a product made from aluminum and is formed in tubed, and conventionally like composition, CCD camera 3 which consists of a BIDIO camera or a digital electronic camera through the attachment material 2 is attached to this inside so that the position of the direction of order can be adjusted.

[0018]

Moreover, a DC power supply is supplied to CCD camera 3 as the operation power supply as everyone knows. The BIDIO signal output code 5 for the DC code 4 for that to be drawn from CCD camera 3 by the exterior of the case 1 for protection, and send out the imaging signal by CCD camera 3 is drawn from CCD camera 3 by the exterior of the case 1 for protection.

The contact button with which 7 prepared the contact button which prepared six in a figure in the end of the DC code 4 in the end of the BIDIO signal output code 5 again is shown, respectively.

[0019]

Thus, the DC code 4 and the BIDIO signal output code 5 which were drawn from the case 1 for protection outside are led to the lookout post in the remote place distant from the installation of CCD camera 3.

[0020]

In the front of said case 1 for protection, the front lid 9 of the shape of a cap surrounded by elastic material, such as rubber, the periphery of transmitting glass 8 again [ the rear surface of the case 1 for

protection ] The rear surface lid 10 of the shape of a cap which consists of elastic material, such as rubber, is attached in the shape of air-water dense, respectively, and said transmitting glass 8 stands face to face against the lens 3a of CCD camera 3.

[0021]

Thus, the constituted case 1 for protection is installed in the roof etc. through the attachment susceptor 11.

[0022]

Although the above is fundamentally different from the composition of the equipment for protection of the conventional camera for surveillance in the point of having replaced the AC cord with the DC code An application concerned is characterized by forming the resistor 12 which generates heat by the operation power supply of the camera 1 for surveillance to the inside of the transmitting glass 8 in a front lid 9 further in the above-mentioned composition.

[0023]

[ the resistor 12 which drawing 3 wound the Nik ROHM line around the coiled form, surrounded this with the insulation material, and was formed in the shape of a block ] The composition at the time of pasting the upper and lower sides and the right-and-left position of the inside of transmitting glass 8 with adhesives, respectively, and preparing in them is shown, and after the lead wire 13 drawn from the both ends of the resistor 12 is connected to series, parallel, or series parallel, electric connection of this terminal is carried out to the branching code 4a which branched from the DC code 4.

[0024]

In addition, in this example, when a resistor 11 is attached to the inside of transmitting glass 8, it is the range which does not bar the monitoring area of the lens 3a of CCD camera 3, and the black shadow layer 14 is formed in the field of transmitting glass 8, for example so that this resistor 12 cannot see through from the front.

[0025]

Drawing 4 shows other work examples at the time of attaching to the up-and-down position of the inside of transmitting glass 8 the band-like resistor 15 which consists of the Nik ROHM line by the print or a pad at a longitudinal direction, and this resistor 15 [ with that lead wire 16 ] After connecting in series or in parallel, electric connection is carried out to the branching code 4a.

[0026]

Moreover, of course in the above, you may form a resistor 15 in the right-and-left position of the inside of transmitting glass 8 in a lengthwise direction.

[0027]

[Effect of the Device]

according to the application concerned, equipment of the heater and fan which were needed conventionally, and wiring of AC power supply are omissible like the above statement -- its length -- while being obtained inexpensive Since safe use was completed and the resistor was moreover directly prepared in transmitting glass, the transmission efficiency of heat is excellent and it has an advantage, like there is also little consumed electric current and it ends.

[0028]

Moreover, since according to the design according to claim 2 existence of a resistor hides by a shadow layer when a protective device is seen through from the front, it has the advantage that there is no \*\*\*\* which spoils appearance.

---

[Brief Description of the Drawings]

[Drawing 1] Whole perspective view

[Drawing 2] The sectional view showing an internal structure

[Drawing 3] The inside figure of a front lid

[Drawing 4] The inside figure of the front lid of other work examples

[Explanations of letters or numerals]

1 Case for Protection

3 CCD Camera

4 The DC Code

4a Branching code

5 BIDIO Signal Output Code

8 Transmitting Glass

9 Front Lid

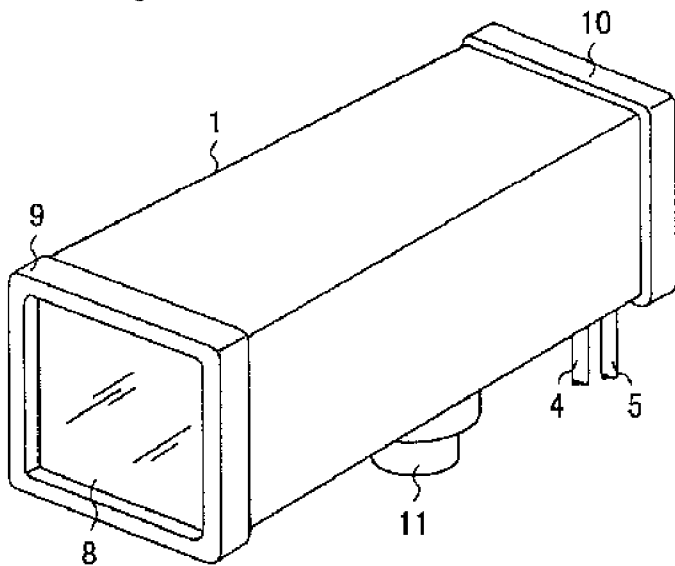
10 Rear Surface Lid

12, 15 Resistor

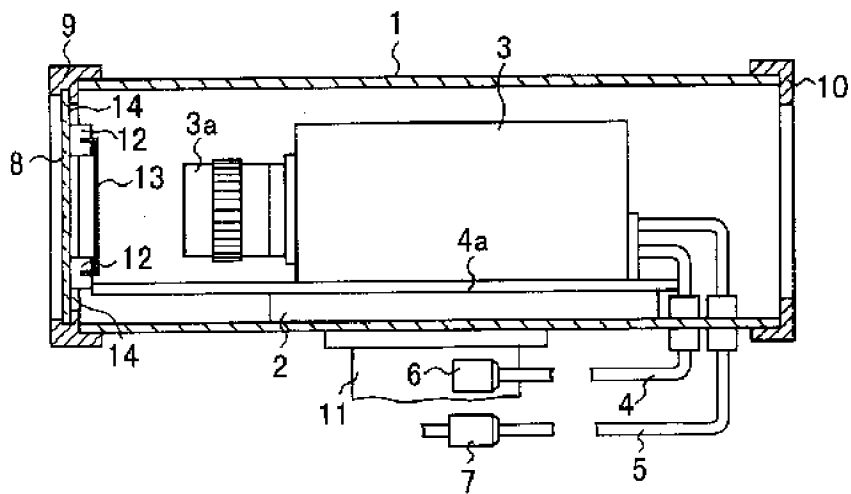
14 Jadot Layer

---

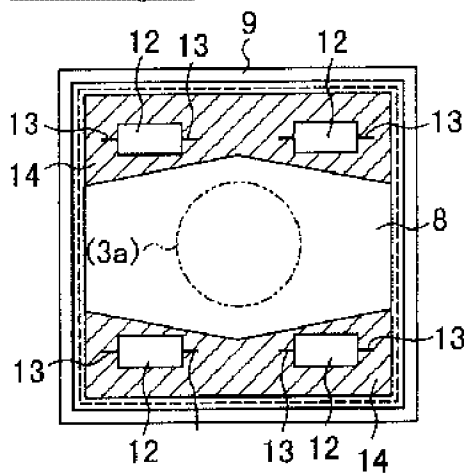
[Drawing 1]



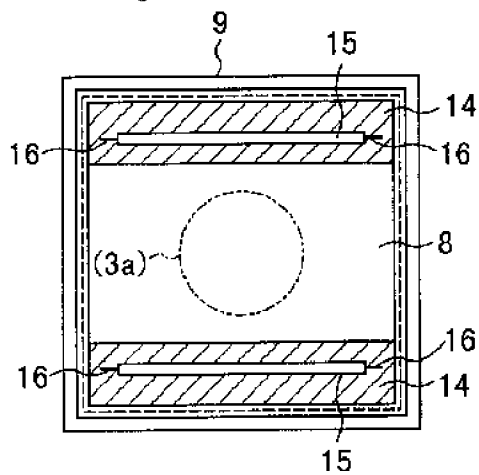
[Drawing 2]



[Drawing 3]



[Drawing 4]



[Translation done.]